

REMARKS

The Final Office Action dated May 26, 2004, has been received and carefully noted. The above amendments to the claims, and the following remarks, are submitted as a full and complete response thereto.

Claims 1, 2, 5, 8, 11, 17-19, 21-23, 26 and 28 are amended to more particularly point out and distinctly claim the subject matter of the invention. No new matter has been added, and no new issues are raised that require further consideration and/or search. Support for the amendments may be found throughout the specification, for example, page 1, lines 9-11 and page 9, lines 1-19. Thus, claims 1-2 and 4-28 are pending in the present application and are respectfully submitted for consideration.

Claims 1-2, 4-12, 14-23 and 25-28 were rejected under 35 U.S.C. §102(e) as allegedly being anticipated by U.S. Patent No. 6,445,924 (*Räsänen*). The Office Action took the position that *Räsänen* teaches each and every element of independent claims 1 and 17. Applicant submits that the cited reference does not disclose or suggest all the features of claims 1 and 17.

Claim 1, upon which claims 2 and 4-16 are dependent, presently recites a method for performing cell load control in a mobile radio network using diversity connections between base stations. The method includes transmitting a load information of a radio cell from a first radio access network controller serving the radio cell to a second radio access network controller not serving the radio cell. The load information is transmitted in response to a load request issued by the second radio access network controller. The

method also includes using the load information in the second radio access network controller for deciding on a load status of the radio cell.

Claim 17, upon which claims 18-28 are dependent, presently recites a system for performing cell load control in a mobile radio network using diversity connections between base stations. The system includes a first radio access network controller comprising transmitting means arranged for transmitting a load information of a radio cell served by the first radio access network controller to a second radio access network controller not serving the radio cell. The load information is transmitted in response to a load request issued by the second radio access network controller. The system also includes the second radio access network controller comprising a receiving means arranged for receiving the load information, and a decision means arranged for deciding on a load status of the radio cell. Further, claim 28 recites a radio network controller used as the first or second radio access network controller in a system according to claim 17.

As discussed in the specification, examples of the present invention enable the load information to be transmitted in response to a load request issued by the second radio access network controller. Thus, the second radio access network controller may actively request load information of the radio cell from the first radio access network controller serving the radio cell even though the second radio access network controller is not yet serving the radio cell. The second radio access network controller may use this actively inquired load information for deciding on the load status of the radio cell.

Further, examples of the present invention enable a radio access network controller that is located in a radio network to directly connect with another radio access network controller. Thus, a radio network controller can contact and request information from a neighboring radio network controller. It is respectfully submitted that the cited reference fails to disclose or suggest all the elements of any of the presently pending claims. Therefore, *Räsänen* fails to provide the critical and unobvious advantages discussed above.

Räsänen relates to a method and apparatus for implementing handover in a mobile communications system. *Räsänen* describes controlling the traffic load in a congested cell in a mobile communications system by handovers into nearby cells that are less congested. *Räsänen* describes that a mobile switching center actively inquires base station controllers on available resources. In response to the inquiry, the base station controllers report on available free channels. The mobile switching center uses the received load information on exit criteria and entry criteria for deciding on handovers. Thus, the mobile switching center of *Räsänen* collects information and performs the task of switching and managing calls but is not part of the radio network. The mobile switching center connects calls to its subordinated base station controllers, to other mobile switching centers or to a public switch telephone network or to an integrated services digital network. *Räsänen* also describes that a mobile station sends measuring results regularly as a report message through the serving base transceiver station to the base station controller. The results of the measurements are analyzed at the base station

controller. Thus, *Räsänen* describes facilitating intra-base station controller handovers due to cell loading by delegating certain mobile switching center functionalities local to the base station controller and reducing signaling load between these two network elements. *Räsänen*, however, does not disclose or suggest the feature of transmitting the load information in response to a load request issued by the second radio access network controller and using the load information in the second radio access network controller for deciding on a load status of the radio cell.

In contrast, claim 1 recites "said load information is transmitted in response to a load request issued by said second radio access network controller" and "using said load information in said second radio access network controller for deciding on a load status of said radio cell." Claim 17 recites "said load information is transmitted in response to a load request issued by said second radio access network controller" and "said second radio access network controller comprising a receiving means arranged for receiving said load information, and a decision means arranged for deciding on a load status of said radio cell." Applicant submits that *Räsänen* does not disclose or suggest at least these features of claims 1 and 17.

Applicant submits that *Räsänen* does not disclose or suggest load information being transmitted in response to a load request issued by a second radio access network controller. *Räsänen* describes a mobile switching center actively inquiring base station controllers on available resources. Applicant submits that the mobile switching center of *Räsänen* does not disclose or suggest the feature of a radio access network controller, as

recited in the claims. The mobile switching center of *Räsänen* does not serve a radio cell and is not responsible for management of radio resources of the radio cell. Applicant submits that *Räsänen* does not disclose or suggest using the load information in a radio access network controller for deciding on a load status of a radio cell. Instead, *Räsänen* describes that all cells are subordinated to the same base station controller and the base station controller has the information on current load and interference situation to establish handover criteria locally. Further, only a report is sent to a mobile switching center when a handover is made. This aspect of *Räsänen* does not disclose or suggest using load information in a radio access network controller for deciding a load status of a radio cell.

Thus, for at least these reasons, applicant submits that *Räsänen* does not disclose each and every element of claims 1 and 17. Applicant respectfully requests that the anticipation rejection be withdrawn.

Claims 13 and 24 were rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over *Räsänen* in view of U.S. Patent No. 6,490,452 (*Boscovic et al.*) The Office Action took the position that *Räsänen* teaches all the features of claims 13 and 24, except for a mobile radio access network is a radio access network of the UMTS. The Office Action then took the position that *Boscovic* teaches a group handover in a cellular communications network having a mobile radio network as a radio access network of the UMTS. Applicant submits that the cited references, either alone or in combination, do not disclose or suggest all the features of any of the presently pending claims.

Claims 1 and 17 are summarized above. Claims 13 and 24 depend directly or indirectly from claims 1 and 17, respectively.

In addition, applicant submits that *Räsänen* does not disclose or suggest all the features of claims 1 and 17. Applicant further submits that *Boscovic* does not disclose or suggest those features of claims 1 and 17 not disclosed or suggested by *Räsänen*.

Boscovic relates to group handover in a cellular communications network. *Boscovic* describes a system to permit handover of a group of mobile stations having like characteristics from a base station operating in one type of network to a base station operating in another type of network. This network can be a universal mobile telecommunications system (UMTS) linked to a base station operating in a different type of network. *Boscovic* hands over a group of calls from an overloaded network to an under-loaded network. *Boscovic*, however, does not disclose or suggest the feature of transmitting load information in response to a load request issued by a second radio access network controller or using the load information in the second radio access network controller for deciding on a load status of a radio cell.

In contrast, as discussed above, claim 1 recites "said load information is transmitted in response to a load request issued by said second radio access network controller" and "using said load information in said second radio access network controller for deciding on a load status of a radio cell." Claim 17 recites some of the features of claim 1 including transmitting a load information in response to a load request issued by a second radio access network controller. Applicant submits that the cited

references, either alone or in combination, do not disclose or suggest at least these features of the presently pending claims.

Boscovic does not disclose or suggest transmitting load information in response to a load request issued by a second radio access network controller. The Office Action did not cite *Boscovic* as providing this feature. The handover process of *Boscovic* does not disclose or suggest a radio access network controller using load information for deciding on a load status of a radio cell. Instead, *Boscovic* exchanges populations of mobile stations between resources. Thus, the cited references, either alone or in combination, do not disclose or suggest all the features of claims 1 and 17 and, therefore, claims 13 and 24.

Further, claims 13 and 24 depend directly or indirectly from independent claims 1 and 17. As discussed above, claims 1 and 17 are not rendered obvious by the cited references, either alone or in combination. If an independent claim is non-obvious, then any claim dependent therefrom is also non-obvious. MPEP 2143.03. Thus, applicant respectfully requests that the obviousness rejection be withdrawn.

It is submitted that each of claims 1, 2 and 4-28 recites subject matter that is neither disclosed nor suggested by the cited references, either alone or in combination. It is therefore respectfully requested that all of claims 1, 2 and 4-28 be allowed, and this application passed to issue.

If for any reason the Examiner determines that the application is not now in condition for allowance, it is respectfully requested that the Examiner contact, by telephone, the applicants' undersigned attorney at the indicated telephone number to arrange for an interview to expedite the disposition of this application.

In the event this paper is not being timely filed, the applicant respectfully petitions for an appropriate extension of time. Any fees for such an extension together with any additional fees may be charged to Counsel's Deposit Account 50-2222.

Respectfully submitted,



William F. Nixon
Registration No. 44,262 *Reg #43,437*

Customer No. 32294
SQUIRE, SANDERS & DEMPSEY LLP
14TH Floor
8000 Towers Crescent Drive
Tysons Corner, Virginia 22182-2700
Telephone: 703-720-7800
Fax: 703-720-7802

WFN:cct